REMARKS

Applicants respectfully request reconsideration of claims 12-17 and 23-36. Claims 12-17 and 23-36 remain in the application. No claims have been amended or added.

Allowable Subject Matter

Claims 15-17, 24-28, 35 and 36

Applicants thank the Examiner for indicating that claims 15-17, 24-28, 35, and 36 contain allowable subject matter if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Rejections under 35 U.S.C. § 103 (a)

Claims 12-14, 23, and 29-34

Claims 12-14, 23, and 29-34 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Britton (U.S. Patent No. 3,904,959) in view of McDonough (U.S. Patent No. 5,945,835).

Applicants respectfully submit that the combination fails to teach each and every element of the rejected claims. Furthermore, one skilled in the art would not be motivated to combine the cited references. As such, Applicants request reconsideration of the rejected claims.

Claim 23

Claim 23 discloses forming a calibration configuration. Claim 23 requires connecting an adapter to a first coaxial cable, mating a radio frequency probe to said adapter, and connecting a second coaxial cable to said radio frequency probe. Furthermore, claim 23 requires the adapter having a first end configured to join with said first coaxial cable and a second end

configured to mate with a radio frequency probe. Claim 23 also requires obtaining a first signal loss through the calibration configuration.

Britton fails to describe or suggest the above limitations of claim 23. Britton describes a test circuit with a swept RF source 10 that feeds its RF out into an attenuator 34 which absorbs the wave reflected from the device 16 through the coupler detector set 14. (Britton, col. 4, ll. 56-61). The test circuit also has a measuring instrument 36 connected through the probe 28 to the detector-coupler 14. (Britton, col. 4, ll. 61-63). The measuring device is also connected through probe 30 directly to the device under test.

Thus, Britton fails to describe or suggest connecting an adapter to a first coaxial cable, mating a radio frequency probe to said adapter, and connecting a second coaxial cable to said radio frequency probe and the adapter having a first end configured to join with said first coaxial cable and a second end configured to mate with a radio frequency probe.

Additionally, McDonough fails to describe or suggest the above limitations of claim 23. McDonough describes a radio frequency (RF) test probe arrangement with a test probe body with a probe for coupling with a RF port of a circuit to be tested. (McDonough, Abstract). The probe includes an RF contact supported by the probe body for electrically contacting the RF terminal of the RF port of the circuit to be tested, and a ground contact fixed on the probe body in the vicinity of the RF contact for electrically contacting the ground conductor at the RF port. (McDonough, Abstract). A connector mounted on the probe body couples the probe with external test measurement instrumentation. A cable connecter 62 engages a mating connector 64 mounted on the side of the probe body. (McDonough, col. 4, ll. 2-5). A cable connector 62 engaging a mating connector 64 on the side of the probe body is not an adapter.

Thus, McDonough fails to describe or suggest connecting an adapter to a first coaxial cable, mating a radio frequency probe to said adapter, and connecting a second coaxial cable to said radio frequency probe and the adapter having a first end configured to join with said first coaxial cable and a second end configured to mate with a radio frequency probe.

Because both Britton and McDonough do not describe or suggest connecting an adapter to a first coaxial cable, mating a radio frequency probe to said adapter, and connecting a second coaxial cable to said radio frequency probe, and the adapter having a first end configured to join with said first coaxial cable and a second end configured to mate with a radio frequency probe, the combination of the two references fails to render claim 23 obvious.

Furthermore, the references do not suggest combining the two references and one skilled in the art would not be motivated to combine Britton with McDonough. Britton describes a swept frequency measurement system that obtains a calibration curve for a test circuit alone and then a subsequent response measurement of a test device placed in the test circuit. (Britton, Abstract). McDonough describes a radio frequency test probe with integral mount for a circuit board under test that has only one connector (Figure 1, reference 64 and Figure 4, reference 91). The test probe body of McDonough contacts the ground plane of the circuit board and the ground contact of the coaxial connector. (McDonough, col. 4, ll. 13-17). The continuous common reference to ground allows RF measurements to be made reliable and repeated consistently. (McDonough, col. 4, ll. 13-20). The operating impedances of the RF measurement instrument, the coaxial cable, connectors, and the RF contact with respect to the probe body are preferably matched. (McDonough, col. 4, ll. 8-11). McDonough further sets out that "As is known in the art, proper impedance matching will avoid any significant loss or distortion of RF signals passing through the tested circuit's RF port during the test procedure. (McDonough, col. 3, ll. 3-6). Because McDonough describes the impedances are matched and proper impedance matching will not lead to any significant loss or distortion, one skilled in the art would not be motivated to place the radio frequency probe of Britton in the swept frequency measurement system that obtains a calibration curve for a test circuit of McDonough. Therefore, the references do not suggest combination and one skilled in the art would not be motivated to combine Britton with McDonough.

Claim 24-29

Applicants respectfully submit that claims 24-29 are dependent directly or indirectly on claim 23, thus include the same limitations as claim 23. As such, claims 24-29 are patentable for at least the same reasons as claim 23.

Claim 30

Claim 30 discloses a method including forming a calibration configuration and a test configuration. Claim 30 requires forming a calibration configuration including a first coaxial cable, an adapter, and a second coaxial cable. Moreover, claim 30 requires forming a test configuration including a first coaxial cable, a second coaxial cable, an adapter, and a radio frequency probe. Claim 30 also requires the adapter configured to mate with a radio frequency probe and the second coaxial cable.

Britton, discussed above, fails to describe or suggest forming a calibration configuration including a first coaxial cable, an adapter, and a second coaxial cable, forming a test configuration including a first coaxial cable, a second coaxial cable, an adapter, and a radio frequency probe and an adapter configured to mate with a radio frequency probe and the second coaxial cable.

McDonough, discussed above, fails to describe or suggest forming a calibration configuration including a first coaxial cable, an adapter, and a second coaxial cable, forming a test configuration including a first coaxial cable, a second coaxial cable, an adapter, and a radio frequency probe and an adapter configured to mate with a radio frequency probe and the second coaxial cable.

Because both Britton and McDonough do not describe or suggest forming a calibration configuration including a first coaxial cable, an adapter, and a second coaxial cable, forming a test configuration including a first coaxial cable, a second coaxial cable, an adapter, and a radio frequency probe and an adapter configured to mate with a radio frequency probe and the second coaxial cable, the combination of the two references fails to render claim 23 obvious.

Moreover, as discussed above, the references do not suggest combination and one skilled in the art would not be motivated to combine Britton with McDonough.

Claim 31-34

Applicants respectfully submit that claims 31-34 are dependent directly or indirectly on claim 30, thus include the same limitations as claim 30. As such, claims 31-34 are patentable for at least the same reasons as claim 30.

Claim 12

Applicants' claim 12 discloses a calibration configuration and a test configuration. Both the calibration and test configurations use an adapter. These configurations are used to derive a fixture loss through a test fixture that includes a radio frequency test probe. The test configuration is formed by "connecting in series at least the first coaxial cable, the radio frequency test probe in the test fixture, the adapter, and the second coaxial cable." In the test configuration ". . . the adapter contacts the radio frequency test probe" to acquire the radio frequency signal loss through this test configuration.

Britton, discussed above, fails to describe or suggest configurations that are used to derive a fixture loss through a test fixture that includes a radio frequency test probe, a test configuration formed by "connecting in series at least the first coaxial cable, the radio frequency test probe in the test fixture, the adapter, and the second coaxial cable," where "the adapter contacts the radio frequency test probe" to acquire the radio frequency signal loss through this test configuration.

McDonough, discussed above, fails to describe configurations that are used to derive a fixture loss through a test fixture that includes a radio frequency test probe, a test configuration formed by "connecting in series at least the first coaxial cable, the radio frequency test probe in the test fixture, the adapter, and the second coaxial cable," where "the adapter contacts the

radio frequency test probe" to acquire the radio frequency signal loss through this test configuration.

Because both Britton and McDonough do not describe or suggest forming a calibration configuration including a first coaxial cable, an adapter, and a second coaxial cable, forming a test configuration including a first coaxial cable, a second coaxial cable, an adapter, and a radio frequency probe and an adapter configured to mate with a radio frequency probe and the second coaxial cable, the combination of the two references fails to render claim 23 obvious.

Furthermore, as discussed above, the references do not suggest combination and one skilled in the art would not be motivated to combine Britton with McDonough.

Claim 13-17

Applicants respectfully submit that claims 13-17 are dependent directly or indirectly on claim 12, thus include the same limitations as claim 12. As such, claims 13-17 are patentable for at least the same reasons as claim 12.

Claims 12, 23, and 30

Claims 12, 23, and 30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Britton (U.S. Patent No. 3,904,959) in view of Frenkel (U.S. Patent No. 6,538,454 B1).

Applicants respectfully submit that the combination fails to teach each and every element of the rejected claims. As such, Applicants request reconsideration of the rejected claims.

Claim 23

Claim 23 discloses forming a calibration configuration. Claim 23 requires connecting an adapter to a first coaxial cable, mating a radio frequency probe to said adapter, and connecting a second coaxial cable to said radio frequency probe. Furthermore, claim 23 requires the adapter having a first end configured to join with said first coaxial cable and a second end

configured to mate with a radio frequency probe. Claim 23 also requires obtaining a first signal loss through the calibration configuration.

As discussed above, Britton fails to describe or suggest connecting an adapter to a first coaxial cable, mating a radio frequency probe to said adapter, and connecting a second coaxial cable to said radio frequency probe and the adapter having a first end configured to join with said first coaxial cable and a second end configured to mate with a radio frequency probe.

Frenkel describes a microwave microscope for mapping resistivity, thickness, and other electrical characteristics over a surface with resolution of a few micrometers. (Frenkel, col. 1, ll. 8-13). The important task for the near-field microwave microscope is the contactless characterization of conductive layers. (Frenkel, col. 2, ll. 14-17). Frenkel further describes a coax-to-waveguide adapter joined mechanically and electrically to the microwave tube. (Frenkel, col. 4, ll. 36-37).

Frenkel fails to describe or suggest connecting an adapter to a first coaxial cable, mating a radio frequency probe to said adapter, and connecting a second coaxial cable to said radio frequency probe and the adapter having a first end configured to join with said first coaxial cable and a second end configured to mate with a radio frequency probe.

Because both Britton and Frenkel do not describe or suggest forming a calibration configuration including a first coaxial cable, an adapter, and a second coaxial cable, forming a test configuration including a first coaxial cable, a second coaxial cable, an adapter, and a radio frequency probe and an adapter configured to mate with a radio frequency probe and the second coaxial cable, the combination of the two references fails to render claim 23 obvious.

Furthermore, the references do not suggest combining the two references and one skilled in the art would not be motivated to combine Britton with Frenkel. Britton describes a swept frequency measurement system that obtains a calibration curve for a test circuit alone and then a subsequent response measurement of a test device placed in the test circuit connected together as illustrated in Figure 2 (without waveguides). (Britton, Abstract). Frenkel describes a contactless microwave microscope with a coax-to-waveguide adapter for mapping

resistivity, thickness, and other electrical characteristics over a surface with resolution of a few micrometers. (Frenkel, col. 1, ll. 8-13). A person skilled in the art of contactless microwave microscopes would not be motiviated to combine with a swept frequency measurement system without a waveguide or a contactless interface such as Britton.

Claim 30

Claim 30 discloses a method including forming a calibration configuration and a test configuration. Claim 30 requires forming a calibration configuration including a first coaxial cable, an adapter, and a second coaxial cable. Moreover, claim 30 requires forming a test configuration including a first coaxial cable, a second coaxial cable, an adapter, and a radio frequency probe. Claim 30 also requires the adapter configured to mate with a radio frequency probe and the second coaxial cable.

Britton, discussed above, fails to describe or suggest forming a calibration configuration including a first coaxial cable, an adapter, and a second coaxial cable, forming a test configuration including a first coaxial cable, a second coaxial cable, an adapter, and a radio frequency probe and an adapter configured to mate with a radio frequency probe and the second coaxial cable.

As discussed above, Frenkel fails to describe or suggest forming a calibration configuration including a first coaxial cable, an adapter, and a second coaxial cable, forming a test configuration including a first coaxial cable, a second coaxial cable, an adapter, and a radio frequency probe and an adapter configured to mate with a radio frequency probe and the second coaxial cable.

Because both Britton and Frenkel do not describe or suggest forming a calibration configuration including a first coaxial cable, an adapter, and a second coaxial cable, forming a test configuration including a first coaxial cable, a second coaxial cable, an adapter, and a radio frequency probe and an adapter configured to mate with a radio frequency probe and the second coaxial cable, the combination of the two references fails to render claim 23 obvious.

Furthermore, as discussed above, the references do not suggest combining the two references and one skilled in the art would not be motivated to combine Britton with Frenkel.

Claim 12

Applicants' claim 12 discloses a calibration configuration and a test configuration. Both the calibration and test configurations use an adapter. These configurations are used to derive a fixture loss through a test fixture that includes a radio frequency test probe. The test configuration is formed by "connecting in series at least the first coaxial cable, the radio frequency test probe in the test fixture, the adapter, and the second coaxial cable." In the test configuration ". . . the adapter contacts the radio frequency test probe" to acquire the radio frequency signal loss through this test configuration.

Britton, discussed above, fails to describe or suggest configurations that are used to derive a fixture loss through a test fixture that includes a radio frequency test probe, a test configuration formed by "connecting in series at least the first coaxial cable, the radio frequency test probe in the test fixture, the adapter, and the second coaxial cable," where "the adapter contacts the radio frequency test probe" to acquire the radio frequency signal loss through this test configuration.

As discussed above, Frenkel fails to describe or suggest configurations that are used to derive a fixture loss through a test fixture that includes a radio frequency test probe, a test configuration formed by "connecting in series at least the first coaxial cable, the radio frequency test probe in the test fixture, the adapter, and the second coaxial cable," where "the adapter contacts the radio frequency test probe" to acquire the radio frequency signal loss through this test configuration.

Because both Britton and Frenkel do not describe or suggest configurations that are used to derive a fixture loss through a test fixture that includes a radio frequency test probe, a test configuration formed by "connecting in series at least the first coaxial cable, the radio frequency test probe in the test fixture, the adapter, and the second coaxial cable," where "the

adapter contacts the radio frequency test probe" to acquire the radio frequency signal loss through this test configuration, the combination of the two references fails to render claim 23 obvious.

Furthermore, as discussed above, the references do not suggest combination and one skilled in the art would not be motivated to combine Britton with Frenkel.

CONCLUSION

Applicants respectfully submit that the rejection and objection have been overcome by the remarks. Accordingly, Applicants respectfully request the rejection and objection be withdrawn and the claims allowed. If there are any additional charges, please charge Deposit Account No. 02-2666 for any fee deficiency that may be due.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Date: 2/17/06 By: _____

Michael A. Bernadicou
Reg. No. 35,934

12400 Wilshire Boulevard
Seventh Floor
Los Angeles, California 90025
(408) 720-8300